

Claims

1. A device (1) for lifting and displacing the tongue blade (2) of a switch (6), with at least two rollers (12, 14), the axes of which are disposed substantially parallel to a running rail (4) in order to displace the tongue blade (2) transversely to the running rail (4), at least two support carrier pins (22, 24), each of which supports a roller (12, 14), and a base body (8), which supports the support carrier pins (22, 24), whereby the rollers (12, 14) have a projection in at least one first direction in relation to the base body (8),

characterised in that

provided between at least two adjacent rollers is a covering (10) which is oriented towards the first direction and at least partially covers a passage between the at least two adjacent rollers (12, 14).

2. The device (1) according to claim 1, characterised in that the base body (8) has at least one bottom section (8A) as well as one top section (8B) disposed so as to be displaceable on the bottom section (8A), whereby the direction of displacement between the bottom section (8A) and the top section (8B) is disposed at an angle to the plane of displacement of tongue blade (2).
3. The device (1) according to claim 2, characterised in that the bottom section (8A) as well as the top section (8B) have corresponding chamfers (25, 26) on their contact edges.

4. The device (1) according to claim 3, characterised in that the corresponding chamfers (25, 26) are formed in the manner of steps.
5. The device (1) according to one of claims 2 and 3, characterised in that it has a mechanism for displacing the top section (8B) on the bottom section (8A).
6. The device (1) according to claim 5, characterised in that the mechanism for displacing is a threaded rod (27) which is connected to the top section (8B) and the bottom section(8A).
7. The device (1) according to one of the preceding claims, characterised in that the top section (8B) and the bottom section (8A) are preferably capable of being fixed to each other in any displacement position.
8. The device according to one of the preceding claims, characterised in that the covering (10) is at a distance of no more than 5.0 mm, preferably no more than 3.0 mm, from the outer circumference of the at least two adjacent rollers (12, 14).
9. The device according to claim 1 or 2, characterised in that the base body (8) is formed as a casting, preferably integrally with the covering (10).
10. The device according to one of the preceding claims, characterised in that the at least one roller (14) has a projection in the first direction in relation to a reference point of the base body(8) which is larger than that of the remaining rollers (12).

11. The device according to one of the preceding claims, characterised in that a first and a second roller (12, 14) are provided, whereby the first roller (12) has a projection of 2.0 to 3.0 mm and the second roller (14) has a projection of 3.0 to 4.0 mm in the first direction in relation to the base body (8).
12. The device according to one of the preceding claims, characterised in that the base body (8) is provided with an identification mark which indicates the projection of the rollers (12, 14) in each case.
13. The device according to one of the preceding claims, characterised in that the support carrier pins (22, 24) each have at least one limit stop element (26, 28), especially a collar, which limits an insertion depth of the support carrier pins (22, 24) into the base body (8).
14. The device according to one of the preceding claims, characterised in that the rollers (12, 14) are supported on the support carrier pins (22, 24) by friction bearings, which are preferably formed by a synthetic polymer layer provided between an inner circumferential surface of the rollers (12, 14) and an outer circumferential surface of carrier support pins (22, 24), said layer especially preferably having self-lubricating properties.
15. The device according to one of the preceding claims, characterised in that the base body (8) has a symmetrical axis which extends parallel to the rollers (12, 14).
16. The device according to one of the preceding claims, characterised in that the at least two support carrier

pins (22, 24) are provided so as to be incapable of displacement on the base body (8).

17. A method for height adjustment of a device (1) according to one of claims 2 to 16, in which in relation to the bottom section (8A) the top section (8B) is displaced transversely to the running rail (4) in a switch (6).
18. The method according to claim 17, characterised in that displacement of the top section (8B) on the bottom section (8A) is carried out manually.
19. The method according to claim 17, characterised in that displacement of the top section (8B) on the bottom section (8A) is carried out by means of a mechanism provided for this, preferably a threaded rod (27).
20. The method according to one of claims 17 to 19, characterised in that prior to the displacement the means for fixing the top section (8B) and the bottom section (8A) are loosened and after displacement are tightened again, preferably screwed down.